## REMARKS

Claims 1-29 and 45-49 are now pending. No claims stand allowed.

Claims 6-8, 10-12, and 14-20 have been cancelled, without prejudice. Claims 1-3, 5, 9, 21-23, 25-29, 45-47 and 49 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The text of claims 4, 13, 24, and 48 is unchanged, but their meaning is changed because they depend from amended claims. New claims 50-63 have been added by this amendment and also particularly point out and distinctly claim subject matter regarded as the invention. The amendment also contains minor changes of a clerical nature. No "new matter" has been introduced by the amendment.

## The 35 U.S.C. §103 Rejections

Claims 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 28, 45-46, and 49 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Holt et al. (U.S. Pat. No. 6,070,192) in view of Viot et al. (U.S. Pat. No. 6,215,790), among which claims 1, 21, 26, and 45 are independent claims.

In addition, claims 4, 8, 12, 16, 20, 24-25, 29, and 48 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Holt in view of Viot in view of Inoue et al. (U.S. Pat. No. 6,442,616), and claims 2, 6, 10, 14, 18, 22, and 27 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Holt in view of Viot in view of Inoue et al. In view of Reid (U.S. Pat. No. 6,233,616).

These rejections are respectfully traversed

According to M.P.E.P. §2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Furthermore, the mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Claim 1 defines a network access server (NAS) providing a connection to a user in a data communications network, said NAS being capable of communicating with a home gateway server (HGS). The NAS comprises (a) an IP address requester for requesting an IP address from the HGS on behalf of the user without using a tunneling protocol, the HGS maintaining a pool of IP addresses for allocation to authorized users associated with the NAS, (b) an IP address relayer for receiving an IP address allocated to the user from the HGS and for relaying the allocated IP address to the user, and (c) a memory coupled with said IP address requester and said IP address relayer, said memory storing association between an identification of the user and the IP address allocated to the user, as recited in claim 1 as amended.

Holt teaches a NAS 5 communicating with a Network Gateway 9 though which a user 1 receives data provided by a data service provider (DSP) 11, as illustrated in FIG. 2 thereof. Holt describes the NAS 5 as follows (column 11, lines 30-39 and 50-65 thereof):

If no tunnelling protocol is used by the NAS 5, the NAS 5 performs all AAA, and once the end-user 1 is authorized, the end-user 1 is assigned a network address (if required), after which end-user originated packets can be routed to the intended address, and end-user defined packets can be routed to the end-user 1.

If a tunnelling protocol is to be used, the NAS 5 sets up a tunnel (if one does not already exist), and AAA information is forwarded on to the DSP authentication device according to the tunnelling protocol methods.

Once the end-user 1 is authorized, the end-user 1 is assigned a network address (if required), after which end-user originated packets can be routed to the intended address, and end-user defined packets can be routed to the end-user. Once the end-user 1 has been authenticated, the NAS 5 sends a connection confirmation indication, which includes information relating to the data call, such as initial send/receive data rate, Network Gateway identifier, and tunnel identifier (if required). If at any time end-user authorization fails, the end user 1 is disconnected according to the associated authorization protocol, and the NAS 5 sends a connection release indication to the NC 12 with the appropriate termination code and associated connection identifier, and the NC active call counts against the dialed number (or dialed number group) and Network Gateway (if applicable) are decremented.

Accordingly, if the NAS 5 does not use a tunnelling protocol, NAS 5 itself performs authentication of the user 1 and also assigns an IP address (if necessary) to the user 1, and does not request or obtain an IP address from elsewhere. Thus, Holt fails to teach or suggest the IP address requester for requesting an IP address from the HGS on behalf of the user without using a tunneling protocol, as recited in claim 1.

In addition, in the case where an IP address is assigned via the Network Gateway 9, the NAS 5 only sets up a tunnel and does not see or handle the IP address. This is

because, when using a tunneling protocol, an IP packet is encapsulated in a tunneling protocol frame and the NAS 5 only needs to know the end points the tunnel, as is well understood by one of ordinary skill in the art. Thus, Holt also fails to teach or suggest the IP address relayer, as well as the IP address requester, for receiving an IP address allocated to the user from the HGS and for relaying the allocated IP address to the user.

Furthermore, since Holt teaches neither the IP address requester nor the IP address relayer, as discussed above, Holt also fails to teach the memory storing association between an identification of the user and the IP address allocated to the user by the HGS, as recited in claim 1.

In the Office Action, however, the Examiner alleges that Voit discloses "asking HGS (domain name server) for an IP address without the use of tunnel." However, Voit only teaches obtaining an IP address for a user from a Domain Name Sever (DNS) 51 (see FIG. 1 thereof, for example). As is well known to one of ordinary skill in the art, a DNS has a completely different function from a gateway server, and only maintain association between IP addresses and the corresponding domain names. A DNS returns, in response to a request, an IP address corresponding to a domain name specified in that request. Typically, such a domain name identifies a web site from which the user wants to receive certain data. That is, the IP address of Voit is that of the specific web site or the server hosting that web site (i.e., an IP address permanently allocated to the web server), but is not an IP address that is to be allocated to the user. In addition, Voit teaches or suggests none of the above-discussed features recited in claim 1.

Docket No. CISCO-1818 (032590-000091)

Accordingly, Holt, whether considered alone or combined with or modified by Voit, does not teach or suggest the claimed invention defined in claim 1. Claim 21, 26, and 45 includes substantially the same distinctive features as claim 1. It is respectfully requested that the rejection of claims based on Holt and Voit be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

## Dependent Claims

Claims 2-5, 9, and 13 depend from claim 1, claims 22-25 depend form claim 21, claims 27-29 depend from claim 26, and claims 46-49 depend from claim 45, and thus include the limitations of the corresponding independent claims. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reasons.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

## Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

Docket No. CISCO-1818 (032590-000091)

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted, THELEN REID & PRIEST, LLP

Dated: April <u>30</u>, 2003

Masako Ando

Limited Recognition under 37 CFR §10.9(b)

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